

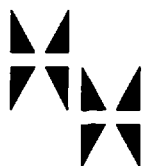


**SUPPLEMENTAL REPORT #1
MERCURY REMOVAL ACTIONS
at
NICOR GAS REPORTING CENTERS
and
GAS STORAGE FIELDS**

**Prepared for:
Nicor Gas**

**by:
Huff & Huff, Inc.**

May 2001



HUFF & HUFF, INC.
ENVIRONMENTAL CONSULTANTS
LaGRANGE, ILLINOIS

CERTIFICATION

Under penalty of law, I certify that, to the best of my knowledge, after appropriate inquiries of all relevant persons involved in the preparation of this report, the information submitted is true, accurate and complete.

James E. Huff
Signature
James E. Huff, P.E.
Name

May 11, 2001
Date



Vice President, Huff & Huff, Inc.
Title, Company

Richard Tappan
Signature

5/15/01
Date

Richard Tappan
Name

Manager Environmental Affairs, Nicor Gas
Title, Company

1. INTRODUCTION

In March 2001, Huff & Huff, Inc. submitted its final report on mercury removal actions at Nicor Gas Reporting Centers and Gas Storage Fields. At the time this report was submitted, mercury removal actions were not yet completed at two facilities, Belvidere and Prospect Heights. This supplemental report has been prepared to document the removal actions completed at these two facilities since the March 2001 Report was submitted.

The work was performed pursuant to and in accordance with the requirements of the "Administrative Order Pursuant to Section 106(a) of the Comprehensive Environmental Response, Compensation, and Liability Act, Docket No. VW-00-C-610," issued by the United States Environmental Protection Agency (U.S. EPA) in September 2000. With the completion of this supplemental work, all mercury removal actions at the Nicor Gas Reporting Centers and Gas Storage Fields under the requirements of U.S. EPA's 106 Order have been accomplished. The details and documentation of these efforts are presented herein.

2. WORK ACTIVITIES

At both Belvidere and Prospect Heights the work activities were similar. On April 6, 2001 approximately 15 cu yd of soil was excavated from the area previously identified as having elevated mercury levels at both facilities. The excavated soil was removed to Settlers Hill for landfilling as a solid waste. Soil samples were collected and the areas were backfilled to grade. More detailed summaries of the activities are presented for each site in the attachments.

3. SOIL SAMPLING RESULTS

At both Belvidere and Prospect Heights, the final soil results achieved the Tier 1 residential objectives as well as the Tier 1 objective for the soil component of Class I groundwater ingestion. Therefore, all mercury remediation objectives have been achieved at these two sites.



Belvidere

BELVIDERE REPORTING CENTER

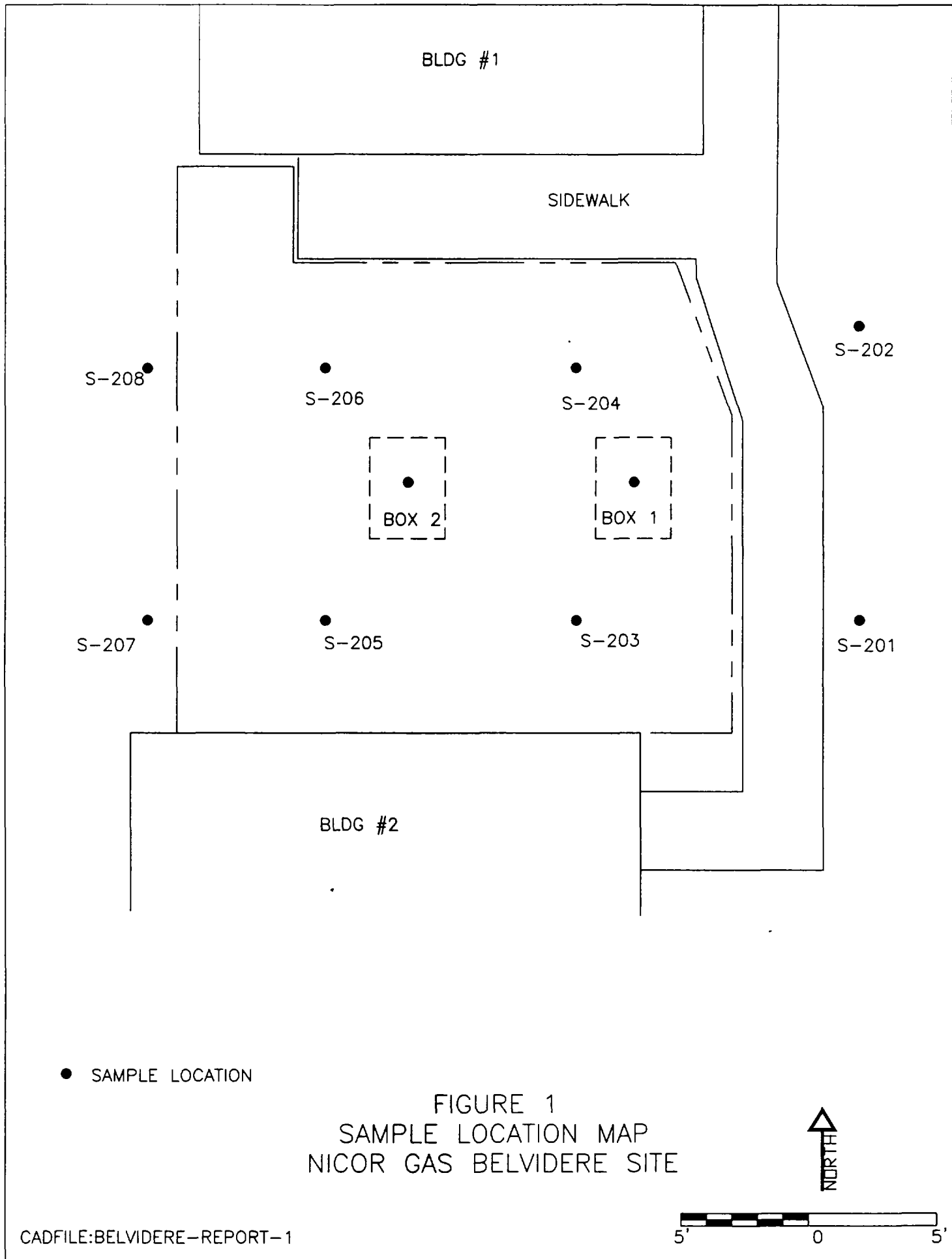
BELVIDERE REPORTING CENTER

On December 4, 2000, Huff & Huff with Heritage Environmental Services removed scrap metal from Box 1, as depicted in Figure 1, at the Nicor Gas Belvidere site. A second nearby box, Box 2, did not contain any scrap metal. The scrap metal collected was transported to the Behr Scrap Metal yard in Rockford, Illinois.

Soil samples were originally collected beneath both boxes on December 4, 2000 at the Belvidere facility because of the presence of mercury vapors within the bins and because the bins were stored on soil. These soil samples were analyzed for total mercury and pH. Total mercury was found to be 71.4 mg/kg beneath Box 1, which exceeded the Tier 1 remedial objectives set forth in the Illinois Tiered Approach to Corrective Action Objectives for construction worker ingestion, residential inhalation, residential ingestion, and the soil component of the Class I groundwater ingestion exposure route. Beneath Box 2, total mercury was found at 0.37 mg/kg, which achieved the Tier 1 remedial objectives for residential land use and soil component of the Class I groundwater ingestion exposure route.

On April 6, 2001, Huff & Huff remobilized to the site and removed approximately 15 cubic yards of soil between the two buildings where the boxes were originally located. The excavation spanned 22 feet from the sidewalk to the west side of the excavation, 18'8" between the north and south buildings, and was one-foot deep as depicted in the attached photographs. Four soil samples were taken outside of the excavation: two on the east side of the sidewalk, and two on the west side of the excavation. Four soil samples were also taken from the floor of the excavation in a ten-foot grid pattern. These samples were split into sample jars for analysis and into plastic cups for measuring the mercury vapor in the closed cup headspace using a Jerome Meter. The excavation was backfilled with gravel and the excavated soil was transported to the Settlers Hill Landfill.

The results of the soil sample analysis are presented in the attached tables. The highest remaining total mercury concentration was at the bottom of the excavation from S-204 at 4.80 mg/kg, which is below the most restrictive residential Tier 1 objective. The TCLP results for all soil samples were below the detection limit of 0.0002 mg/L. All samples achieved the Tier 1 remedial objectives set forth in the Illinois Tiered Approach to Corrective Action for residential land use as well as the soil component of the Class I groundwater ingestion exposure route. Therefore the mercury removal action at Belvidere is complete, and no further actions are required at this site.



**SOIL SAMPLE RESULTS
COMPARED TO TIER 1 RESIDENTIAL
INGESTION AND INHALATION OBJECTIVES
Nicor Gas - Belvidere, Illinois
April 6, 2001**

Sample	Total Mercury
	mg/kg
Residential Ingestion	23.00
Residential Inhalation	10.00
S-201	1.70
S-202	0.25
S-203	0.27
S-204	4.80
S-205	0.27
S-206	1.50
S-207	0.10
S-208	0.41

C:\DOC\Nicor\Mercury\Belvidere\Excavation soil results Belvidere.xls\Residential

**SOIL SAMPLE TCLP RESULTS
COMPARED TO SOIL COMPONENT OF
CLASS I GROUNDWATER INGESTION OBJECTIVES**

Nicor Gas - Belvidere, Illinois

April 6, 2001

Sample	TCLP Mercury, mg/L
Class I	0.0020
S-201	<0.0002
S-202	<0.0002
S-203	<0.0002
S-204	<0.0002
S-205	<0.0002
S-206	<0.0002
S-207	<0.0002
S-208	<0.0002

C:\DOC\Nicor\Mercury\Belvidere\Excavation soil results Belvidere.xls\GW

**SOIL SAMPLE RESULTS
COMPARED TO SOIL COMPONENT OF
CLASS I GROUNDWATER INGESTION OBJECTIVES
Nicor Gas - Belvidere, Illinois
April 6, 2001**

Sample	Soil pH	Objective, ^{a/} mg/kg	Total Mercury, mg/kg
S-201	8.46	8.00	1.70
S-202	7.21	3.30	0.25
S-203	7.30	6.40	0.27
S-204	7.52	6.40	4.80
S-205	7.60	6.40	0.27
S-206	7.60	6.40	1.50
S-207	8.64	8.00	0.10
S-208	8.24	8.00	0.41

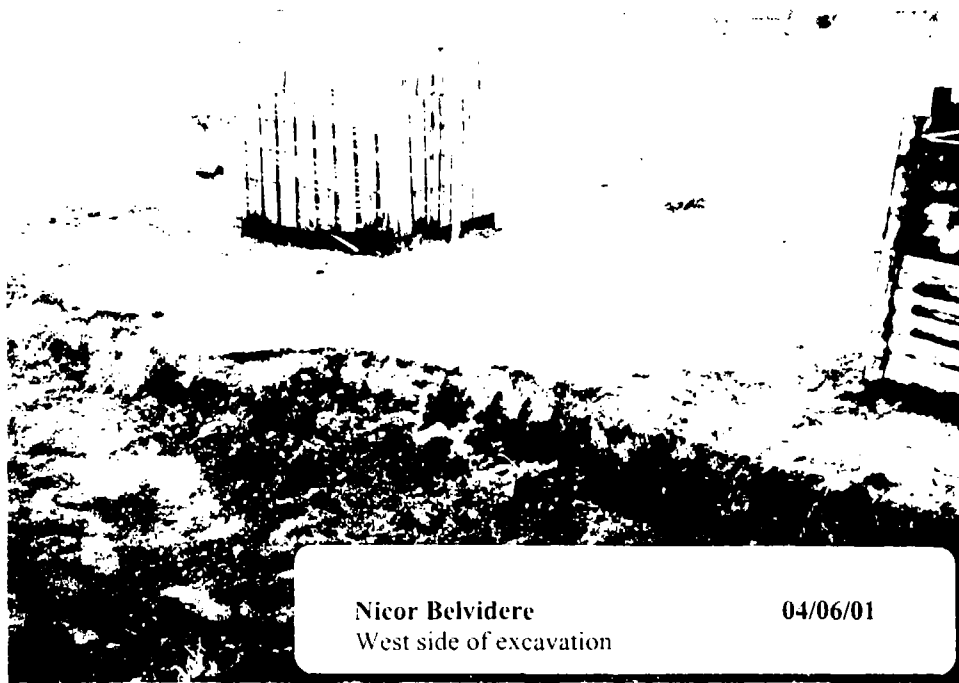
a/ Based on soil pH

C:\DOC\Nicor\Mercury\Belvidere\Excavation soil results Belvidere.xls]Soil Migration

JEROME METER READINGS OF SOIL SAMPLES
Nicor Gas - Belvidere, Illinois
April 6, 2001

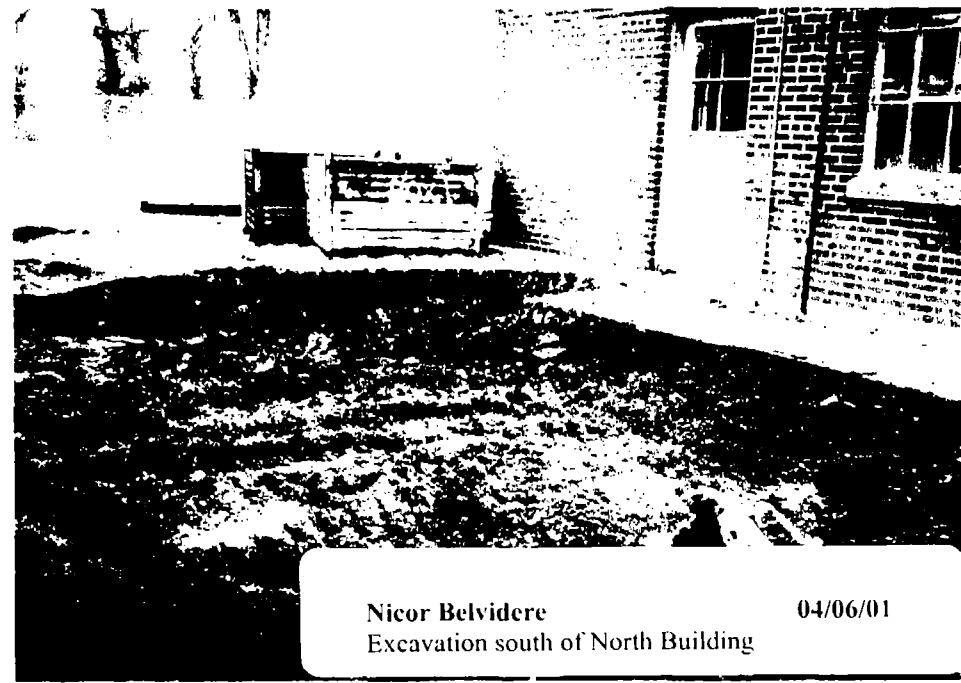
Sample	Mercury Vapor Concentration,
	mg/m ³
S-201	0.005
S-202	0.005
S-203	0.000
S-204	0.000
S-205	0.000
S-206	0.000
S-207	0.002
S-208	0.000

C:\DOC\Nicor\Mercury\Belvidere\Excavation soil results Belvidere.xls\Jerome Meter



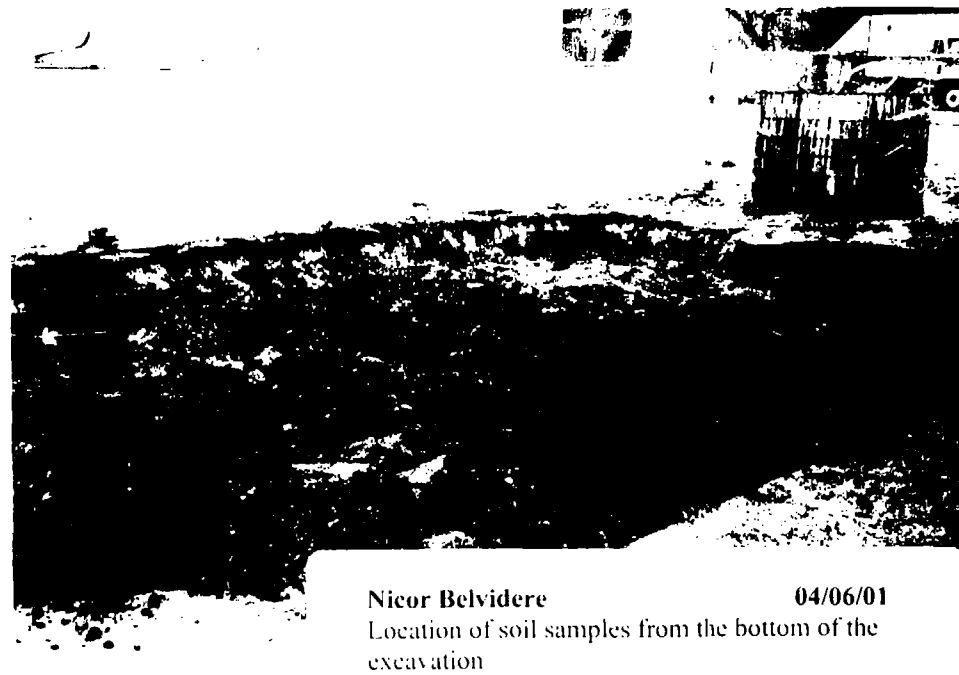
Nicor Belvidere
West side of excavation

04/06/01



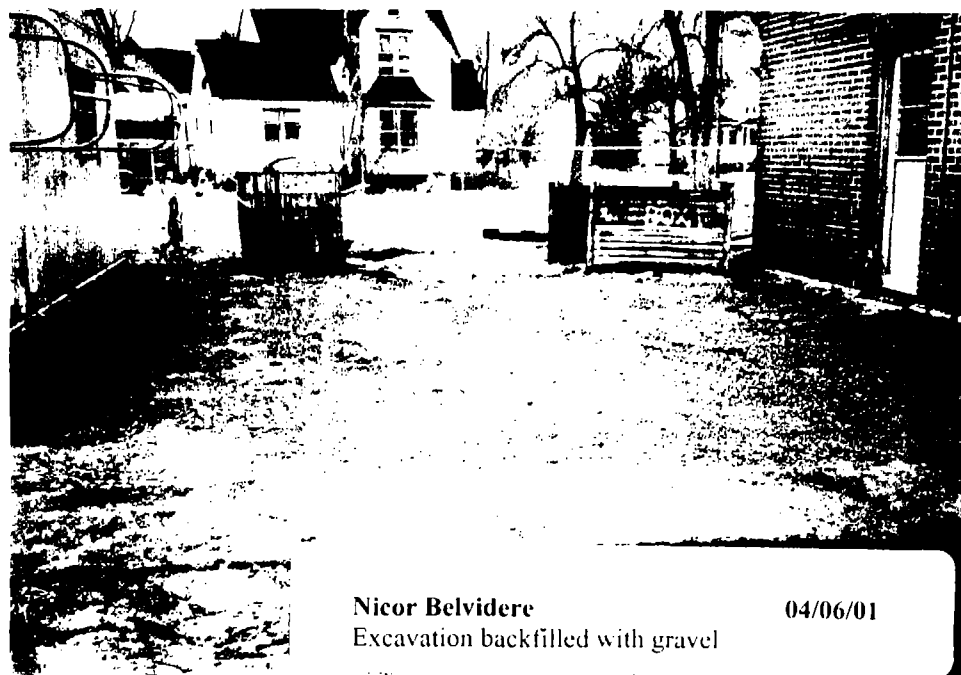
Nicor Belvidere
Excavation south of North Building

04/06/01



Nicor Belvidere
Location of soil samples from the bottom of the
excavation

04/06/01



Nicor Belvidere
Excavation backfilled with gravel

04/06/01

Phone: 630-289-3100
Fax: 630-289-5445

**To assist us in using the proper analytical methods,
is this work being conducted for regulatory purposes?**

Client Name: HUFFSTUFF Client #: _____
Address: 512 W. BURLINGTON AVE.
City/State/Zip Code: LAKELAND, FL 34055
Project Manager: HOMER RIZVI
Telephone Number: (708) 585-7958 Fax: (708) 719-3526
Sampler Name: (Print Name) HOMER RIZVI
Sampler Signature: Homer Rizvi

Project Name: NICOR - BELVIDERE
Project #: _____
Site/Location ID: BELVIDERE State: IL
Report To: HOMA RIZVI
Invoice To: ~~HOMA RIZVI~~
Quote #: _____ PO#: 018554

TAT	Date Sampled	Time Sampled	G = Grab, C = Composite	Field Filtered	Matrix	Preservation & # of Containers	Analyze For:	QC Deliverables
					SL - Sludge DW - Drinking Water GW - Groundwater S - Soil/Solid WW - Wastewater Specify Other	HNO ₃ HCl NaOH H ₂ SO ₄ Methanol None Other (Specify)		None Level 2 (Batch QC) Level 3 Level 4 Other: _____
SAMPLE ID								REMARKS
S-201	4/6/01		G		S			
S-202								
S-203								
S-204								
S-205								
S-206								
S-207								
S-208								

Special Instructions: COOLER #89.

Relinquished By: [Signature] Date: 4/9/01 Time: 9:45

Relinquished By: [Signature] Date: 4/9/01 Time: 2:15

Relinquished By: [Signature] Date: 4/9/01 Time: 9:45

Laboratory Comments: 100 Service

Init Lab Temp: _____ Rec Lab Temp: _____

Custody Seals: Y N

Bottles Supplied by TestAmerica: Y N

Method of Shipment: _____

TestAmerica

INCORPORATED

Homa Rizvi
HUFF & HUFF INC.
512 West Burlington
Suite 100
LaGrange, IL 60525

04/19/2001

Job Number: 01.03013

IEPA Cert. No.: 100221

WDNR Cert. No.: 999447130

Enclosed is the Analytical and Quality Control reports for the following samples submitted to Bartlett Division of TestAmerica for analysis.

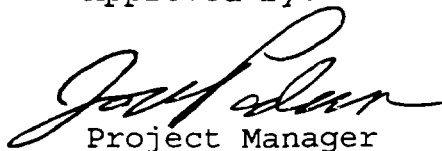
Project Description: Nicor - Belvidere, IL.

Sample Number	Sample Description	Date Taken	Date Received
623234	S-201	04/06/2001	04/09/2001
623235	S-202	04/06/2001	04/09/2001
623236	S-203	04/06/2001	04/09/2001
623237	S-204	04/06/2001	04/09/2001
623238	S-205	04/06/2001	04/09/2001
623239	S-206	04/06/2001	04/09/2001
623240	S-207	04/06/2001	04/09/2001
623241	S-208	04/06/2001	04/09/2001

Sample analysis in support of the project referenced above has been completed and results are presented on the following pages. These results apply only to the samples analyzed. Reproduction of this report only in whole is permitted. Please refer to the enclosed "Key to Abbreviations" for definition of terms. Procedures used follow TestAmerica Standard Operating Procedures which reference the methods listed on your report. Should you have questions regarding procedures or results, please do not hesitate to call. TestAmerica has been pleased to provide these analytical services for you.

This Quality Control report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

Approved by:


Project Manager

Page 1 of 12

ANALYTICAL REPORT

Homa Rizvi
HUFF & HUFF INC.
512 West Burlington
Suite 100
LaGrange, IL 60525

04/19/2001

Sample No. : 623234

Job No.: 01.03013

Sample Description: S-201
Nicor - Belvidere, IL.

Date Taken: 04/06/2001
Time Taken:

Date Received: 04/09/2001
Time Received: 14:15

Parameter	Result	Flag	Units	Reporting Limit	Date Analyzed	Time Analyzed	Analyst Initials	Analytical Method
pH, Non-Aqueous	8.46		units	0.10	04/16/2001		jht	SW 9045B
Solids, Total	93.4		%	0.1	04/13/2001		jht	SM 2540
TCLP Metals Extraction	Leached				04/13/2001		kkp	SW 1311
Mercury, CVAA	1.7		mg/kg dw	0.043	04/18/2001		efw2	SW 7471A
TCLP-Mercury, CVAA	<0.0002		mg/L	0.0002	04/19/2001		efw2	SW 7470A

ANALYTICAL REPORT

Homa Rizvi
HUFF & HUFF INC.
512 West Burlington
Suite 100
LaGrange, IL 60525

04/19/2001

Sample No. : 623235

Job No.: 01.03013

Sample Description: S-202
Nicor - Belvidere, IL.

Date Taken: 04/06/2001
Time Taken:

Date Received: 04/09/2001
Time Received: 14:15

Parameter	Result	Flag	Units	Reporting Limit	Date Analyzed	Time Analyzed	Analyst Initials	Analytical Method
pH, Non-Aqueous	7.21		units	0.10	04/16/2001		jht	SW 9045B
Solids, Total	83.1		%	0.1	04/13/2001		jht	SM 2540
TCLP Metals Extraction	Leached				04/13/2001		kkp	SW 1311
Mercury, CVAA	0.25		mg/kg dw	0.048	04/18/2001		efw2	SW 7471A
TCLP-Mercury, CVAA	<0.0002		mg/L	0.0002	04/19/2001		efw2	SW 7470A

ANALYTICAL REPORT

Homa Rizvi
HUFF & HUFF INC.
512 West Burlington
Suite 100
LaGrange, IL 60525

04/19/2001

Sample No. : 623236

Job No.: 01.03013

Sample Description: S-203
Nicor - Belvidere, IL.

Date Taken: 04/06/2001
Time Taken:

Date Received: 04/09/2001
Time Received: 14:15

Parameter	Result	Flag	Units	Reporting Limit	Date Analyzed	Time Analyzed	Analyst Initials	Analytical Method
pH, Non-Aqueous	7.30		units	0.10	04/16/2001		jht	SW 9045B
Solids, Total	81.2		%	0.1	04/13/2001		jht	SM 2540
TCLP Metals Extraction	Leached				04/13/2001		kkp	SW 1311
Mercury, CVAA	0.27		mg/kg dw	0.049	04/18/2001		efw2	SW 7471A
TCLP-Mercury, CVAA	<0.0002		mg/L	0.0002	04/19/2001		efw2	SW 7470A

ANALYTICAL REPORT

Homa Rizvi
HUFF & HUFF INC.
512 West Burlington
Suite 100
LaGrange, IL 60525

04/19/2001

Sample No. : 623237

Job No.: 01.03013

Sample Description: S-204
Nicor - Belvidere, IL.

Date Taken: 04/06/2001
Time Taken:

Date Received: 04/09/2001
Time Received: 14:15

Parameter	Result	Flag	Units	Reporting Limit	Date Analyzed	Time Analyzed	Analyst Initials	Analytical Method
pH, Non-Aqueous	7.52		units	0.10	04/16/2001		jht	SW 9045B
Solids, Total	87.0		%	0.1	04/13/2001		jht	SM 2540
TCLP Metals Extraction	Leached				04/13/2001		kkp	SW 1311
Mercury, CVAA	4.8		mg/kg dw	0.046	04/18/2001		efw2	SW 7471A
TCLP-Mercury, CVAA	<0.0002		mg/L	0.0002	04/19/2001		efw2	SW 7470A

ANALYTICAL REPORT

Homa Rizvi
HUFF & HUFF INC.
512 West Burlington
Suite 100
LaGrange, IL 60525

04/19/2001

Sample No. : 623238

Job No.: 01.03013

Sample Description: S-205
Nicor - Belvidere, IL.

Date Taken: 04/06/2001
Time Taken:

Date Received: 04/09/2001
Time Received: 14:15

Parameter	Result	Flag	Units	Reporting Limit	Date Analyzed	Time Analyzed	Analyst Initials	Analytical Method
pH, Non-Aqueous	7.60		units	0.10	04/16/2001		jht	SW 9045B
Solids, Total	84.7		%	0.1	04/13/2001		jht	SM 2540
TCLP Metals Extraction	Leached				04/13/2001		kkp	SW 1311
Mercury, CVAA	0.27		mg/kg dw	0.047	04/18/2001		efw2	SW 7471A
TCLP-Mercury, CVAA	<0.0002		mg/L	0.0002	04/19/2001		efw2	SW 7470A

ANALYTICAL REPORT

Homa Rizvi
HUFF & HUFF INC.
512 West Burlington
Suite 100
LaGrange, IL 60525

04/19/2001

Sample No. : 623239

Job No.: 01.03013

Sample Description: S-206
Nicor - Belvidere, IL.

Date Taken: 04/06/2001
Time Taken:

Date Received: 04/09/2001
Time Received: 14:15

Parameter	Result	Flag	Units	Reporting Limit	Date Analyzed	Time Analyzed	Analyst Initials	Analytical Method
pH, Non-Aqueous	7.60		units	0.10	04/16/2001		jht	SW 9045B
Solids, Total	86.0		%	0.1	04/13/2001		jht	SM 2540
TCLP Metals Extraction	Leached				04/13/2001		kkp	SW 1311
Mercury, CVAA	1.5		mg/kg dw	0.047	04/18/2001		efw2	SW 7471A
TCLP-Mercury, CVAA	<0.0002		mg/L	0.0002	04/19/2001		efw2	SW 7470A

ANALYTICAL REPORT

Homa Rizvi
HUFF & HUFF INC.
512 West Burlington
Suite 100
LaGrange, IL 60525

04/19/2001

Sample No. : 623240

Job No.: 01.03013

Sample Description: S-207
Nicor - Belvidere, IL.

Date Taken: 04/06/2001
Time Taken:

Date Received: 04/09/2001
Time Received: 14:15

Parameter	Result	Flag	Units	Reporting Limit	Date Analyzed	Time Analyzed	Analyst Initials	Analytical Method
pH, Non-Aqueous	8.64		units	0.10	04/16/2001		jht	SW 9045B
Solids, Total	93.0		%	0.1	04/13/2001		jht	SM 2540
TCLP Metals Extraction	Leached				04/13/2001		kkp	SW 1311
Mercury, CVAA	0.10		mg/kg dw	0.043	04/18/2001		efw2	SW 7471A
TCLP-Mercury, CVAA	<0.0002		mg/L	0.0002	04/19/2001		efw2	SW 7470A

ANALYTICAL REPORT

Homa Rizvi
HUFF & HUFF INC.
512 West Burlington
Suite 100
LaGrange, IL 60525

04/19/2001

Sample No. : 623241

Job No.: 01.03013

Sample Description: S-208
Nicor - Belvidere, IL.

Date Taken: 04/06/2001
Time Taken:

Date Received: 04/09/2001
Time Received: 14:15

Parameter	Result	Flag	Units	Reporting Limit	Date Analyzed	Time Analyzed	Analyst Initials	Analytical Method
pH, Non-Aqueous	8.24		units	0.10	04/16/2001		jht	SW 9045B
Solids, Total	90.5		%	0.1	04/13/2001		jht	SM 2540
TCLP Metals Extraction	Leached				04/13/2001		kkp	SW 1311
Mercury, CVAA	0.41		mg/kg dw	0.044	04/18/2001		efw2	SW 7471A
TCLP-Mercury, CVAA	<0.0002		mg/L	0.0002	04/19/2001		efw2	SW 7470A

Homa Rizvi
HUFF & HUFF INC.
512 West Burlington
Suite 100
LaGrange, IL 60525

04/19/2001

Job Number: 01.03013

IEPA Cert. No.: 100221
WDNR Cert. No.: 999447130

Project Description: Nicor - Belvidere, IL.

CASE NARRATIVE

No analytical exceptions were noted outside of routine method protocols.

TestAmerica

INCORPORATED

KEY TO ABBREVIATIONS and METHOD REFERENCES

<	: Less than; When appearing in the results column indicates the analyte was not detected at or above the reported value.
N/S	: No coliform bacteria were present and the opinion is satisfactory.
P/U	: Coliform bacteria were present and the opinion is unsatisfactory.
mg/L	: Concentration in units of milligrams of analyte per liter of sample. Measurement used for aqueous samples. Can also be expressed as parts per million (ppm).
ug/g	: Concentration in units of micrograms of analyte per gram of sample. Measurement used for non-aqueous samples. Can also be expressed as parts per million (ppm) or mg/Kg.
ug/L	: Concentration in units of micrograms of analyte per liter of sample. Measurement used for aqueous samples. Can also be expressed as parts per billion (ppb).
ug/Kg	: Concentration in units of micrograms of analyte per kilogram of sample. Measurement used for non-aqueous samples. Can also be expressed as parts per billion (ppb).
TCLP	: These initials appearing in front of an analyte name indicate that the Toxicity Characteristic Leaching Procedure (TCLP) was performed for this test.
Surr:	: These initials are the abbreviation for surrogate. Surrogates are compounds that are chemically similar to the compounds of interest. They are part of the method quality control requirements.
%	: Percent; To convert ppm to %, divide the result by 10,000. To convert % to ppm, multiply the result by 10,000.
ICP	: Indicates analysis was performed using Inductively Coupled Plasma Spectroscopy.
AA	: Indicates analysis was performed using Atomic Absorption Spectroscopy.
GFAA	: Indicates analysis was performed using Graphite Furnace Atomic Absorption Spectroscopy.
PQL	: Practical Quantitation Limit; the lowest level that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operating conditions.

Method References

ASTM	"American Society for Testing Materials"
EPA	"Methods for Chemical Analysis of Water and Wastes", USEPA, EPA 600/4-79-020, Revised March 1983.
EPA	"Test Methods for Organic Chemical Analysis of Municipal and Industrial Wastewater", EPA 600/4-82-057, July 1982.
SDWA	"Methods for the Determination of Organic Compounds in Finished Drinking Water and Raw Source Water", USEPA, September 1986.
SDWA	"Methods for the Determination of Metals in Environmental Samples", Supplement I USEPA, EPA-600/R-94/111, May 1994.
SM	"Standard Methods for the Examination of Water and Wastewater", APHA-AWWA-WPCF, 18th Edition.
SW	"Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", USEPA, SW-846.

ATTACHMENT: CHAIN OF CUSTODY

Following are the chain of custody documents associated with the samples pertaining to this report.



TRANSPORTATION SYSTEMS, INC.

21900 South Central Ave.
Matteson, IL 60443

(708) 720-6000

Stone Dispatch • 708-720-1713

Waste Dispatch • 708-720-0708

E 679642

4-6 01

Date

Delivery Date

Settlers Hill RDF PRO No.

Buttavia, IL Lot No.

P.O. No.

Ship To:

Shipper:

WEIGHT (lb)	PRODUCT DESCRIPTION	C.O.D.	AMOUNT
LOAD 1-Load	Waste	Total	
EMPTY		Paid By:	<input type="checkbox"/> Cash <input type="checkbox"/> Check
NET			

SOURCE		ADDRESS		TICKET NOS.	
Mosback Ind.		826 Corvus St. Belvidere, IL			
HOURLY		LOAD TIMES			
PORTAL TO PORTAL		1 2 3			
TIME	LOCATION				
Start		Arrive 0750			
Finish		Begin Load 0840			
Total		End Load 0940			
Number of Loads		Depart 0950			
Signature		Total 3.00			
MANIFEST NUMBER PB-8007		REQUESTED TIME		REASON FOR DELAY	
		0950		NO stockpile - Loader digging and loading into	
		LOADER SIGNATURE		Load 3	
		DRIVER SIGNATURE		Load 2	
				TRUCK # OTSI TRAILER #	

UNLOAD TIMES		COMMENTS	
1 2 3			
Arrive			
Begin Unload			
End Unload			
Depart			
Total			
REQUESTED TIME	REASON FOR DELAY		
0950			
RECEIVER SIGNATURE Load 1	RECEIVER SIGNATURE Load 2	RECEIVER SIGNATURE Load 3	
W. O. Dunkel			
TRUCK #	OTSI TRAILER #		
232			

CUSTOMER COPY

INDUSTRIAL WASTE TRACKING RECEIPT



A Waste Management Company

Disposal Site: Settler Hill

Profile Number: PB 8007

Generator: Nicor Gas (1844 Ferry Rd)

Location: Belvidere facility

Waste Description: soil impacted with mercury

Generator's Signature or Designee: Anna Leri

Transporter: OZINGA

Driver's Signature: W. O. Dunkel 232

Date: 4/6/01

☒ Yards ☐ Tons

WHITE-Transporter / YELLOW-Landfill / PINK-Stays on site / GOLD-Generator

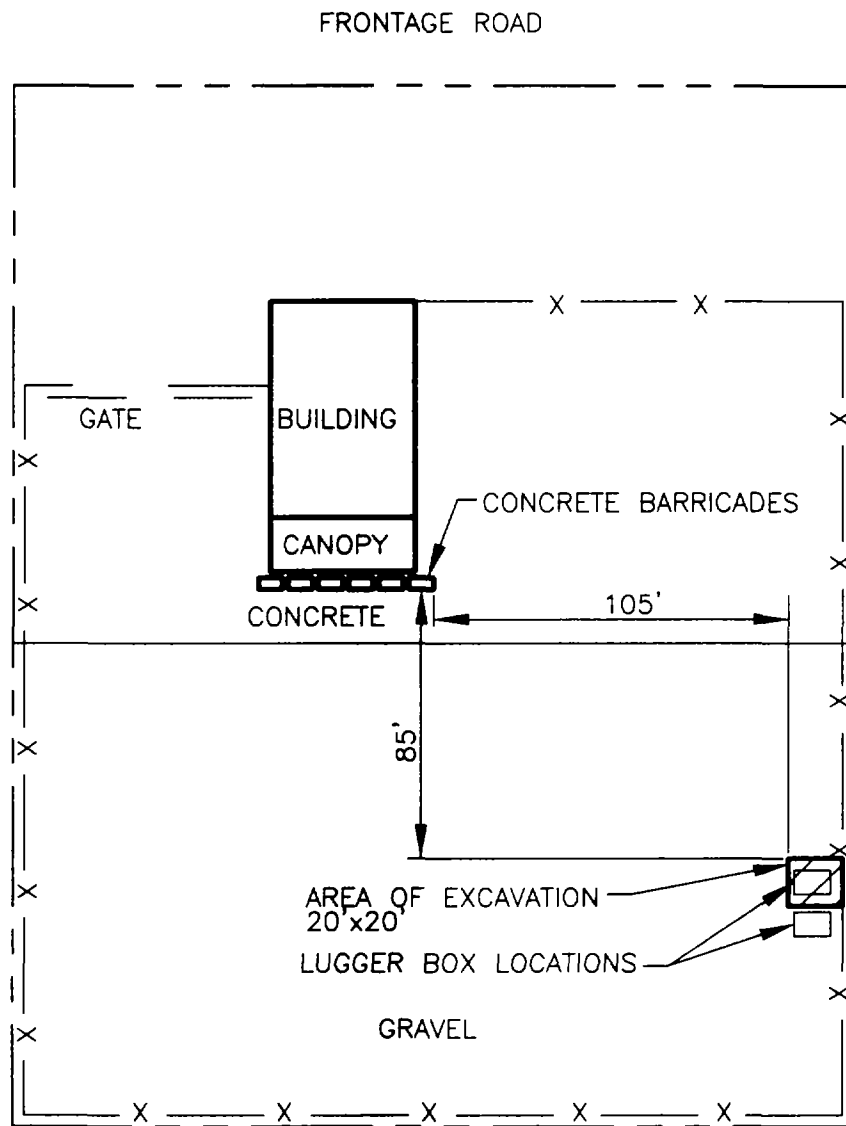
PROSPECT HEIGHTS REPORTING CENTER

PROSPECT HEIGHTS REPORTING CENTER

On September 7, 2000 and November 13, 2000, Huff & Huff with Heritage Environmental Services removed scrap metal from the North Box and South Box, as depicted in Figure 1, at the Nicor Gas Prospect Heights site. The scrap metal was transported to the United Scrap yard in Cicero, Illinois. Since the North Box and South Box were on gravel, soil samples were collected beneath where these boxes were located at Prospect Heights. These soil samples were analyzed for total mercury. Total mercury was found to be 11.0 mg/kg beneath the North Box, which is above the Tier 1 remedial objectives set forth in the Illinois Tiered Approach to Corrective Action Objectives for residential inhalation and the soil component of the Class I groundwater ingestion exposure route. A mercury concentration of 0.28 mg/kg was measured beneath the South Box, which achieves residential land use and soil component of the Class I groundwater ingestion exposure route remediation objectives.

On April 6, 2001, approximately 15 cubic yards of soil were removed from beneath where the North Box was originally located. The excavation was approximately 20 by 20 feet, and was one-foot deep, as depicted in the attached photographs. Four samples were taken outside of the excavation: two on the north side of the excavation, and two on the west side of the excavation. Four soil samples were also collected within the excavation in a ten-foot grid pattern. These samples were split into sample jars for analysis and into plastic cups for measuring the mercury vapor in the closed cup headspace using a Jerome Meter. Each sample was tested for total mercury, soil pH, and TCLP mercury. A sample was also collected from beneath where the South Box was originally located and tested for TCLP mercury only. The excavation was backfilled with gravel and the excavated soil was transported to Settlers Hill Landfill for disposal.

The results of the soil samples are presented in the attached tables. The highest analysis was from sample #2 collected north of the excavation with a total mercury concentration of 0.71 mg/kg. The TCLP results for all soil samples were below the detection limit of 0.0002 mg/L. All samples achieved the Tier 1 remedial objectives set forth in the Illinois Tiered Approach to Corrective Action for residential land use and the soil component of the Class I groundwater ingestion exposure route. Therefore the mercury removal action at Prospect Heights is complete, and no further actions are required at this site.



NOT TO SCALE

FIGURE 1
PROSPECT HEIGHTS HEADQUARTERS
SITE LAYOUT MAP

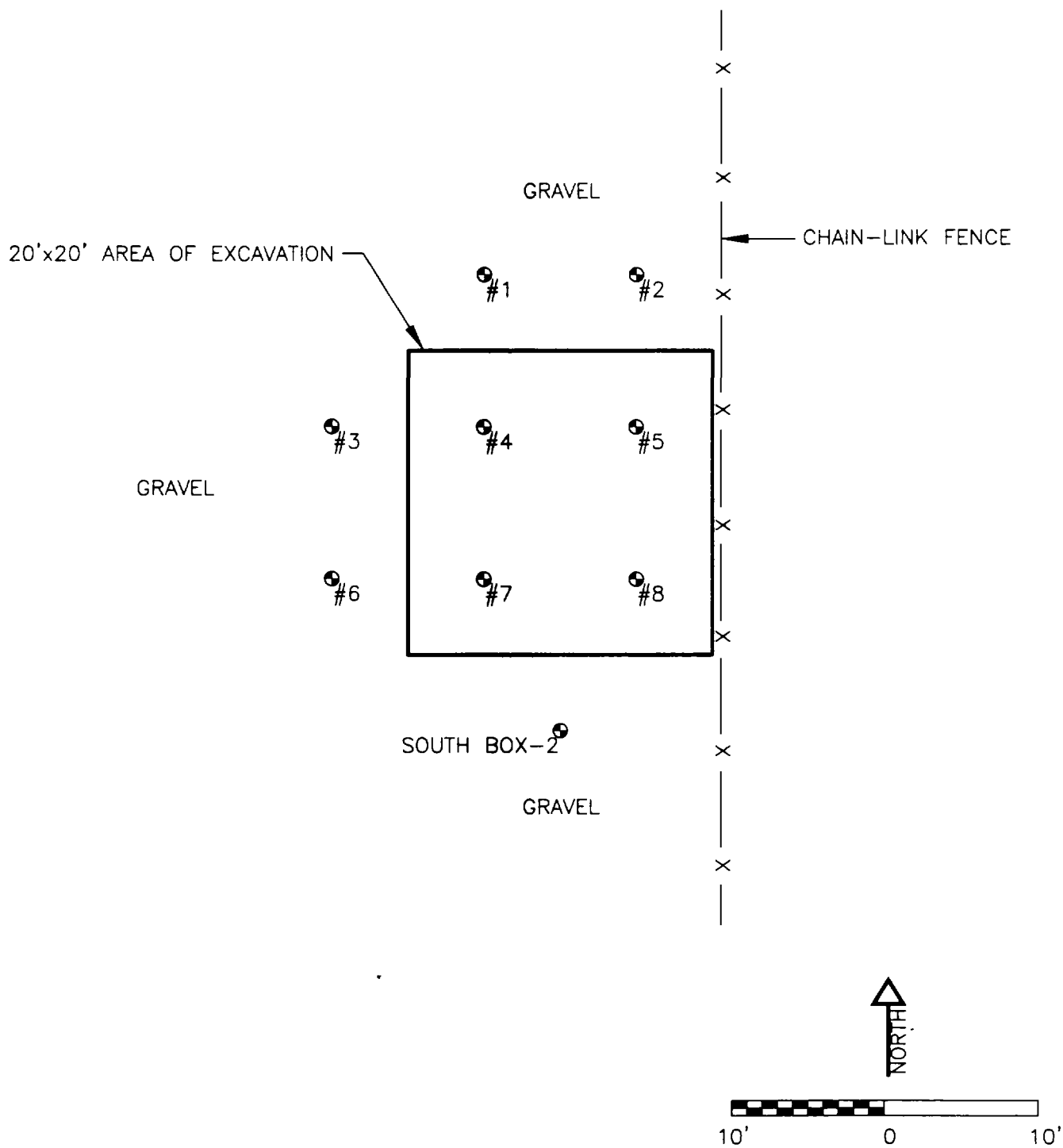


FIGURE 2
SAMPLE LOCATION MAP
PROSPECT HEIGHTS HEADQUARTERS

**SOIL SAMPLE TCLP RESULTS
COMPARED TO SOIL COMPONENT OF
CLASS I GROUNDWATER INGESTION OBJECTIVES
Nicor Gas - Prospect Heights, Illinois
April 6, 2001**

Sample	TCLP Mercury, mg/L
Class I	0.0020
#1	<0.0002
#2	<0.0002
#3	<0.0002
#4	<0.0002
#5	<0.0002
#6	<0.0002
#7	<0.0002
#8	<0.0002
South Box- 2	<0.0002

C:\MDOC\Nicor\Mercury\Prospect Heights\Excavation soil results Pros Hts.xls\GW

**SOIL SAMPLE RESULTS
COMPARED TO TIER 1 RESIDENTIAL
INGESTION AND INHALATION OBJECTIVES
Nicor Gas - Prospect Heights, Illinois
April 6, 2001**

Sample	Total Mercury, mg/kg
Residential Ingestion	23.000
Residential Inhalation	10.000
#1	0.081
#2	0.710
#3	0.150
#4	0.160
#5	<0.046
#6	0.350
#7	<0.047
#8	0.150

C:\DOC\Nicor\Mercury\Prospect Heights\Excavation soil results Pros Hts.xls\Residential

**SOIL SAMPLE RESULTS
COMPARED TO SOIL COMPONENT OF
CLASS I GROUNDWATER INGESTION OBJECTIVES
Nicor Gas - Prospect Heights, Illinois
April 6, 2001**

Sample	Soil pH	Objective, ^{a/} mg/kg	Total Mercury, mg/kg
#1	8.12	8.000	0.081
#2	8.17	8.000	0.710
#3	8.32	8.000	0.150
#4	8.22	8.000	0.160
#5	7.93	8.000	<0.046
#6	8.27	8.000	0.350
#7	7.35	6.400	<0.047
#8	7.73	6.400	0.150

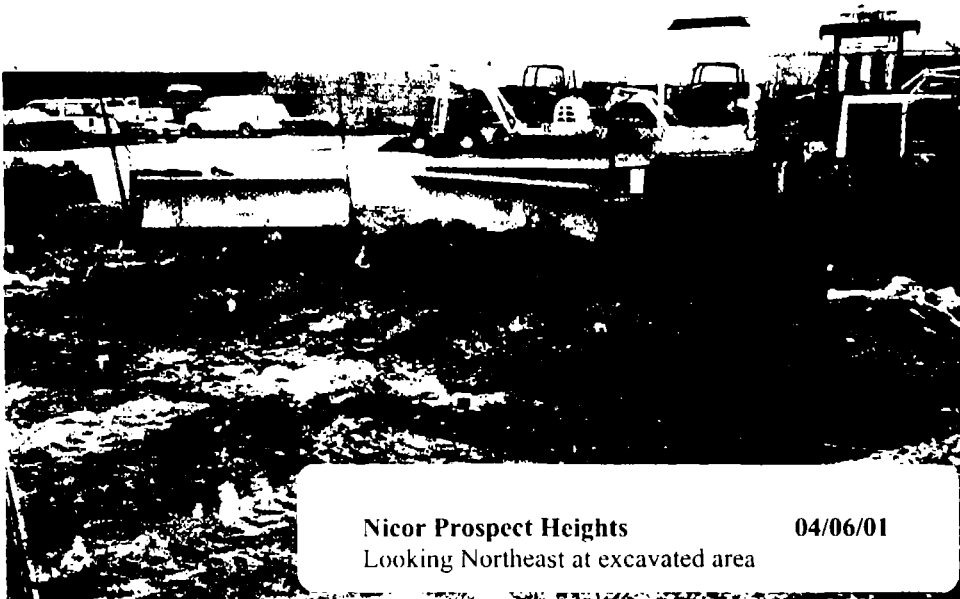
^{a/} Based on soil pH

C:\DOC\Nicor\Mercury\Prospect Heights\Excavation soil results Pros Hts.xls\Soil Migration

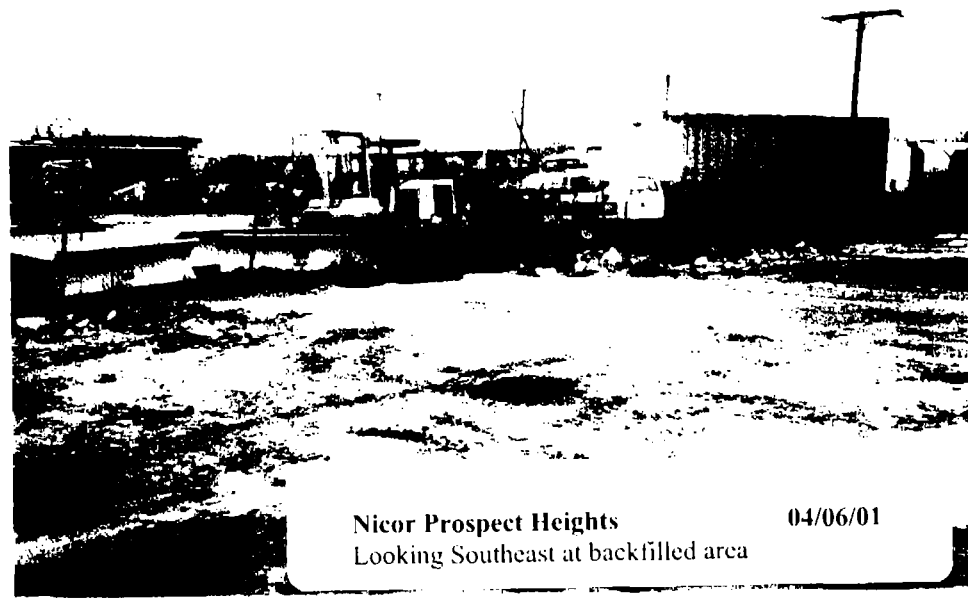
JEROME METER READINGS OF SOIL SAMPLES
Nicor Gas - Prospect Heights, Illinois
April 6, 2001

Sample	Mercury Vapor Concentration,
	mg/m ³
#1	0.000
#2	0.000
#3	0.000
#4	0.000
#5	0.000
#6	0.000
#7	0.000
#8	0.000

C:\1DOCNicor\Mercury\Prospect Heights\Excavation soil results Pros His.xls\Jerome Meter



Nicor Prospect Heights
Looking Northeast at excavated area



Nicor Prospect Heights
Looking Southeast at backfilled area

TestAmerica

INCORPORATED

Mr. Darren Greving
HUFF & HUFF INC.
512 West Burlington
Suite 100
LaGrange, IL 60525

04/19/2001

Job Number: 01.03014

IEPA Cert. No.: 100221

WDNR Cert. No.: 999447130

Enclosed is the Analytical and Quality Control reports for the following samples submitted to Bartlett Division of TestAmerica for analysis.


Project Description: Nicor - Prospect Heights, IL.

Sample Number	Sample Description	Date Taken	Date Received
623242	#1	04/06/2001	04/09/2001
623243	#2	04/06/2001	04/09/2001
623244	#3	04/06/2001	04/09/2001
623245	#4	04/06/2001	04/09/2001
623246	#5	04/06/2001	04/09/2001
623247	#6	04/06/2001	04/09/2001
623248	#7	04/06/2001	04/09/2001
623249	#8	04/06/2001	04/09/2001
623250	South Box-2	04/06/2001	04/09/2001

Sample analysis in support of the project referenced above has been completed and results are presented on the following pages. These results apply only to the samples analyzed. Reproduction of this report only in whole is permitted. Please refer to the enclosed "Key to Abbreviations" for definition of terms. Procedures used follow TestAmerica Standard Operating Procedures which reference the methods listed on your report. Should you have questions regarding procedures or results, please do not hesitate to call. TestAmerica has been pleased to provide these analytical services for you.

This Quality Control report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

Approved by:


Project Manager

Page 1 of 13

ANALYTICAL REPORT

Mr. Darren Greving
HUFF & HUFF INC.
512 West Burlington
Suite 100
LaGrange, IL 60525

04/19/2001

Sample No. : 623242

Job No.: 01.03014

Sample Description: #1
Nicor - Prospect Heights, IL.

Date Taken: 04/06/2001
Time Taken:

Date Received: 04/09/2001
Time Received: 14:15

Parameter	Result	Flag	Units	Reporting Limit	Date Analyzed	Time Analyzed	Analyst Initials	Analytical Method
pH, Non-Aqueous	8.12		units	0.10	04/16/2001		jht	SW 9045B
Solids, Total	81.9		%	0.1	04/13/2001		jht	SM 2540
TCLP Metals Extraction	Leached				04/13/2001		kkp	SW 1311
Mercury, CVAA	0.081		mg/kg dw	0.049	04/18/2001		efw2	SW 7471A
TCLP-Mercury, CVAA	<0.0002		mg/L	0.0002	04/19/2001		efw2	SW 7470A

ANALYTICAL REPORT

Mr. Darren Greving
HUFF & HUFF INC.
512 West Burlington
Suite 100
LaGrange, IL 60525

04/19/2001

Sample No. : 623243

Job No.: 01.03014

Sample Description: #2
Nicor - Prospect Heights, IL.

Date Taken: 04/06/2001
Time Taken:

Date Received: 04/09/2001
Time Received: 14:15

Parameter	Result	Flag	Units	Reporting Limit	Date Analyzed	Time Analyzed	Analyst Initials	Analytical Method
pH, Non-Aqueous	8.17		units	0.10	04/16/2001		jht	SW 9045B
Solids, Total	78.8		%	0.1	04/13/2001		jht	SM 2540
TCLP Metals Extraction	Leached				04/13/2001		kkp	SW 1311
Mercury, CVAA	0.71		mg/kg dw	0.051	04/18/2001		efw2	SW 7471A
TCLP-Mercury, CVAA	<0.0002		mg/L	0.0002	04/19/2001		efw2	SW 7470A

ANALYTICAL REPORT

Mr. Darren Greving
HUFF & HUFF INC.
512 West Burlington
Suite 100
LaGrange, IL 60525

04/19/2001

Sample No. : 623244

Job No.: 01.03014

Sample Description: #3
Nicor - Prospect Heights, IL.

Date Taken: 04/06/2001
Time Taken:

Date Received: 04/09/2001
Time Received: 14:15

Parameter	Result	Flag	Units	Reporting Limit	Date Analyzed	Time Analyzed	Analyst Initials	Analytical Method
pH, Non-Aqueous	8.32		units	0.10	04/16/2001		jht	SW 9045B
Solids, Total	88.1		%	0.1	04/13/2001		jht	SM 2540
TCLP Metals Extraction	Leached				04/13/2001		kkp	SW 1311
Mercury, CVAA	0.15		mg/kg dw	0.045	04/18/2001		efw2	SW 7471A
TCLP-Mercury, CVAA	<0.0002		mg/L	0.0002	04/19/2001		efw2	SW 7470A

ANALYTICAL REPORT

Mr. Darren Greving
HUFF & HUFF INC.
512 West Burlington
Suite 100
LaGrange, IL 60525

04/19/2001

Sample No. : 623245

Job No.: 01.03014

Sample Description: #4
Nicor - Prospect Heights, IL.

Date Taken: 04/06/2001
Time Taken:

Date Received: 04/09/2001
Time Received: 14:15

Parameter	Result	Flag	Units	Reporting Limit	Date Analyzed	Time Analyzed	Analyst Initials	Analytical Method
pH, Non-Aqueous	8.22		units	0.10	04/16/2001		jht	SW 9045B
Solids, Total	88.7		%	0.1	04/13/2001		jht	SM 2540
TCLP Metals Extraction	Leached				04/13/2001		kkp	SW 1311
Mercury, CVAA	0.16		mg/kg dw	0.045	04/18/2001		efw2	SW 7471A
TCLP-Mercury, CVAA	<0.0002		mg/L	0.0002	04/19/2001		efw2	SW 7470A

ANALYTICAL REPORT

Mr. Darren Greving
HUFF & HUFF INC.
512 West Burlington
Suite 100
LaGrange, IL 60525

04/19/2001

Sample No. : 623246

Job No.: 01.03014

Sample Description: #5
Nicor - Prospect Heights, IL.

Date Taken: 04/06/2001
Time Taken:

Date Received: 04/09/2001
Time Received: 14:15

Parameter	Result	Flag	Units	Reporting Limit	Date Analyzed	Time Analyzed	Analyst Initials	Analytical Method
pH, Non-Aqueous	7.93		units	0.10	04/16/2001		jht	SW 9045B
Solids, Total	86.1		%	0.1	04/13/2001		jht	SM 2540
TCLP Metals Extraction	Leached				04/13/2001		kkp	SW 1311
Mercury, CVAA	<0.046		mg/kg dw	0.046	04/18/2001		efw2	SW 7471A
TCLP-Mercury, CVAA	<0.0002		mg/L	0.0002	04/19/2001		efw2	SW 7470A

ANALYTICAL REPORT

Mr. Darren Greving
HUFF & HUFF INC.
512 West Burlington
Suite 100
LaGrange, IL 60525

04/19/2001

Sample No. : 623247

Job No.: 01.03014

Sample Description: #6
Nicor - Prospect Heights, IL.

Date Taken: 04/06/2001
Time Taken:

Date Received: 04/09/2001
Time Received: 14:15

Parameter	Result	Flag	Units	Reporting Limit	Date Analyzed	Time Analyzed	Analyst Initials	Analytical Method
pH, Non-Aqueous	8.27		units	0.10	04/16/2001		jht	SW 9045B
Solids, Total	86.5		%	0.1	04/13/2001		jht	SM 2540
TCLP Metals Extraction	Leached				04/13/2001		kkp	SW 1311
Mercury, CVAA	0.35		mg/kg dw	0.046	04/18/2001		efw2	SW 7471A
TCLP-Mercury, CVAA	<0.0002		mg/L	0.0002	04/19/2001		efw2	SW 7470A

ANALYTICAL REPORT

Mr. Darren Greving
HUFF & HUFF INC.
512 West Burlington
Suite 100
LaGrange, IL 60525

04/19/2001

Sample No. : 623248

Job No.: 01.03014

Sample Description: #7
Nicor - Prospect Heights, IL.

Date Taken: 04/06/2001
Time Taken:

Date Received: 04/09/2001
Time Received: 14:15

Parameter	Result	Flag	Units	Reporting Limit	Date Analyzed	Time Analyzed	Analyst Initials	Analytical Method
pH, Non-Aqueous	7.35		units	0.10	04/16/2001		jht	SW 9045B
Solids, Total	84.4		%	0.1	04/13/2001		jht	SM 2540
TCLP Metals Extraction	Leached				04/16/2001		kkp	SW 1311
Mercury, CVAA	<0.047		mg/kg dw	0.047	04/18/2001		efw2	SW 7471A
TCLP-Mercury, CVAA	<0.0002		mg/L	0.0002	04/19/2001		efw2	SW 7470A

ANALYTICAL REPORT

Mr. Darren Greving
HUFF & HUFF INC.
512 West Burlington
Suite 100
LaGrange, IL 60525

04/19/2001

Sample No. : 623249

Job No.: 01.03014

Sample Description: #8
Nicor - Prospect Heights, IL.

Date Taken: 04/06/2001
Time Taken:

Date Received: 04/09/2001
Time Received: 14:15

Parameter	Result	Flag	Units	Reporting Limit	Date Analyzed	Time Analyzed	Analyst Initials	Analytical Method
pH, Non-Aqueous	7.73		units	0.10	04/16/2001		jht	SW 9045B
Solids, Total	85.6		%	0.1	04/13/2001		jht	SM 2540
TCLP Metals Extraction	Leached				04/16/2001		kkp	SW 1311
Mercury, CVAA	0.15		mg/kg dw	0.047	04/18/2001		efw2	SW 7471A
TCLP-Mercury, CVAA	<0.0002		mg/L	0.0002	04/19/2001		efw2	SW 7470A

ANALYTICAL REPORT

Mr. Darren Greving
HUFF & HUFF INC.
512 West Burlington
Suite 100
LaGrange, IL 60525

04/19/2001

Sample No. : 623250

Job No.: 01.03014

Sample Description: South Box-2
Nicor - Prospect Heights, IL.

Date Taken: 04/06/2001
Time Taken:

Date Received: 04/09/2001
Time Received: 14:15

Parameter	Result	Flag	Units	Reporting Limit	Date Analyzed	Time Analyzed	Analyst Initials	Analytical Method
pH, Non-Aqueous	8.20		units	0.10	04/16/2001		jht	SW 9045B
TCLP Metals Extraction	Leached				04/16/2001		kkp	SW 1311
TCLP-Mercury, CVAA	<0.0002		mg/L	0.0002	04/19/2001		efw2	SW 7470A

Mr. Darren Greving
HUFF & HUFF INC.
512 West Burlington
Suite 100
LaGrange, IL 60525

04/19/2001

Job Number: 01.03014

IEPA Cert. No.: 100221

WDNR Cert. No.: 999447130

Project Description: Nicor - Prospect Heights, IL.

CASE NARRATIVE

No analytical exceptions were noted outside of routine method protocols.

TestAmerica

INCORPORATED

KEY TO ABBREVIATIONS and METHOD REFERENCES

<	: Less than; When appearing in the results column indicates the analyte was not detected at or above the reported value.
N/S	: No coliform bacteria were present and the opinion is satisfactory.
P/U	: Coliform bacteria were present and the opinion is unsatisfactory.
mg/L	: Concentration in units of milligrams of analyte per liter of sample. Measurement used for aqueous samples. Can also be expressed as parts per million (ppm).
ug/g	: Concentration in units of micrograms of analyte per gram of sample. Measurement used for non-aqueous samples. Can also be expressed as parts per million (ppm) or mg/Kg.
ug/L	: Concentration in units of micrograms of analyte per liter of sample. Measurement used for aqueous samples. Can also be expressed as parts per billion (ppb).
ug/Kg	: Concentration in units of micrograms of analyte per kilogram of sample. Measurement used for non-aqueous samples. Can also be expressed as parts per billion (ppb).
TCLP	: These initials appearing in front of an analyte name indicate that the Toxicity Characteristic Leaching Procedure (TCLP) was performed for this test.
Surr:	: These initials are the abbreviation for surrogate. Surrogates are compounds that are chemically similar to the compounds of interest. They are part of the method quality control requirements.
%	: Percent; To convert ppm to %, divide the result by 10,000. To convert % to ppm, multiply the result by 10,000.
ICP	: Indicates analysis was performed using Inductively Coupled Plasma Spectroscopy.
AA	: Indicates analysis was performed using Atomic Absorption Spectroscopy.
GFAA	: Indicates analysis was performed using Graphite Furnace Atomic Absorption Spectroscopy.
PQL	: Practical Quantitation Limit; the lowest level that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operating conditions.

Method References

ASTM	"American Society for Testing Materials"
EPA	"Methods for Chemical Analysis of Water and Wastes", USEPA, EPA 600/4-79-020, Revised March 1983.
EPA	"Test Methods for Organic Chemical Analysis of Municipal and Industrial Wastewater", EPA 600/4-82-057, July 1982.
SDWA	"Methods for the Determination of Organic Compounds in Finished Drinking Water and Raw Source Water", USEPA, September 1986.
SDWA	"Methods for the Determination of Metals in Environmental Samples", Supplement I USEPA, EPA-600/R-94/111, May 1994.
SM	"Standard Methods for the Examination of Water and Wastewater", APHA-AWWA-WPCF, 18th Edition.
SW	"Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", USEPA, SW-846.

ATTACHMENT: CHAIN OF CUSTODY

Following are the chain of custody documents associated with the samples pertaining to this report.

TestAmerica

Bartlett Division
850 West Bartlett Road
Bartlett, IL 60103
Phone: 630-288-3100
Fax: 630-288-5445

To assist us in using the proper analytical methods,
is this work being conducted for regulatory purposes?
Compliance Monitoring

Client Name: State of IL

Address: 512 N. Franklin

Client #:

Project Name: NICOL

Project #: ROSEBERRY

Site/Location ID: _____ State: _____

City/State/Zip Code: ALABAMA, IL 60575

Project Manager: DAVID GREENING

Telephone Number: (708) 579-5940 Fax: (708) 579-3526

Sampler Name: (Print Name) DAVID GREENING

Sampler Signature: David Greening

Quote #: _____ PO#: 16594

Invoice To: _____

Report To: DAVID GREENING

State: _____

TAT	Standard	Rush (surcharges may apply)	Date Needed:	Fax Results: <input checked="" type="radio"/> Y <input type="radio"/> N	Sample ID	Date Sampled	Time Sampled	G = Grab, C = Composite	Field Filtered	SL - Sludge DW - Drinking Water GW - Groundwater S - Soil/Solid WW - Wastewater Specify Other	HNO ₃	HCl	NaOH	H ₂ SO ₄	Methanol	None	Other (Specify)	Matth	Preservation & # of Containers	Analyze For:	QC Deliverables	
#1						4/6/01		G														
#2																						
#3																						
#4																						
#5																						
#6																						
#7																						
#8																						
Sample Box -2						4/6/01		G														
Special Instructions:																						
Retinquished By: <u>David Greening</u> Date: <u>4/9/01</u> Time: <u>9:45</u> Received By: <u>David Greening</u> Date: <u>4/9/01</u> Time: <u>9:45</u>																						
Retinquished By: <u>David Greening</u> Date: <u>4/9/01</u> Time: <u>2:15</u> Received By: <u>David Greening</u> Date: <u>4/9/01</u> Time: <u>1:45</u>																						
Retinquished By: <u>David Greening</u> Date: <u>4/9/01</u> Time: <u>1:15</u> Received By: <u>David Greening</u> Date: <u>4/9/01</u> Time: <u>1:15</u>																						
LABORATORY COMMENTS: Init Lab Temp: _____ Rec Lab Temp: _____ Custody Seal: Y N Bottles Supplied by TestAmerica: _____ Method of Shipment: _____																						

INDUSTRIAL WASTE TRACKING RECEIPT



A Waste Management Company

Disposal Site: Settlers Hill

Profile Number: PB 8007

Generator: Nicol Gas (1844 Ferry Rd)

Location: Prospect Heights facility

Waste Description: Soil impacted with Mercury

15 ☒ Yards ☐ Tons

Generator's Signature or Designee: Danae Jewing

Transporter: OZINIA

Driver's Signature: W. O'Kull

Date: 4/6/01

WHITE-Transporter / YELLOW-Landfill / PINK-Stays on site / GOLD-Generator